(19) World Intellectual Property Organization

International Bureau



547*8*40

) (BATA BUNDURUN BURNA NEW BENN BENN BURN IN HIN BENN DEBEN DERN HERRE NEW BURNE DEN BURNE HER NEU HERR HER HE

(43) International Publication Date 16 September 2004 (16.09.2004)

PCT

(10) International Publication Number WO 2004/078729 A1

- (51) International Patent Classification⁷: C07D 213/79, 213/80, 405/12, 409/12, 401/12, 413/12, 417/12, 401/06, 401/08, 417/06, 417/08, 413/06, 413/08
- (21) International Application Number:

PCT/EP2004/002291

- (22) International Filing Date: 5 March 2004 (05.03.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 373/03

7 March 2003 (07.03.2003) CH

- (71) Applicant (for all designated States except US): SYN-GENTA PARTICIPATIONS AG [CH/CH]; Schwarzwaldallee 215, CH-4058_Basel (CH).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): JACKSON, David, Anthony [GB/CH]; Syngenta Corp Protection Muenchwilen AG, Breitenloh 5, CH-Muenchwilen (CH). BOW-DEN, Martin, Charles [GB/GB]; Syngenta Huddersfield Works, Leeds Road, Huddersfield, West Yorkshire, HD2 1FF (GB).

- (74) Common Representative: SYNGENTA PARTICIPA-TIONS AG; Intellectual Property, P.O. Box, 4002 Basel (CH).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: PROCESS FOR THE PRODUCTION OF SUBSTITUTED NICOTINIC ACID ESTERS

$$\begin{array}{c|c} R_{05} & O \\ R_{4} & N & R_{1} \\ X_{1} & R_{2} \end{array} \qquad (I)$$

$$\begin{array}{c} OR_3 \\ R_{05} \\ O \end{array} \tag{II)}$$

(57) Abstract: The present invention relates to a process for the preparation of compounds of formula (I) wherein the substituents are as defined in claim 1, by reaction of a compound of formula (II) wherein R_3 is C_1 - C_8 alkyl or C_3 - C_6 cycloalkyl and R_4 and R_{05} are as defined for formula (I), with a compound of formula (III) wherein R_1 , R_2 and R_3 , are as defined for formula (I) in claim 1, in an inert solvent in the presence of a proton source.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.